

" 5. To drive a similar row of sheeting piles on the lower side to that on the upper side down to the rock and to remove all spoil from the dock side of the same down to the rock, and to fill in with Portland cement concrete.

" The object of taking out the spoil or materials down to the rock in the manner as above described being to make a water tight Cofferdam of concrete independent of any of the outer or wing wall works, and, at the same time, to make such concrete or inner dam a portion of the structural works of the Dock."

The cost of the works, as per this memo, was stated by Mr Kinnipple would not exceed \$24,000.00.

It will be noted that in item 1, Mr Kinnipple acknowledged that the works in the close-piling and masonry of the wing walls was imperfect and defective, and that it was necessary to make it watertight, and I believe, so far as it was possible, a certain amount of work for remedying these defects was executed.

The work of depositing clay, as specified in item 2, was duly executed, and I may add, a much greater amount of material other than clay has been deposited between the entrance walls.

Mr Kinnipple must have been furnished with, or obtained erroneous information, or he would not have submitted the proposal contained in item 3, to "remove the whole of material or soft soil..... down to the rock" for at no time since during the progress of the work has the rock been found at any point between "the strutting, or inner row of piles, of the coffer-dam and the face of the outer invert," and therefore his suggestions in this item had to be modified.

Erroneous information also obtained with respect to the additional rows of sheeting piles mentioned in item 4, which were to have been driven to the rock, for no rock was met with in driving piles at a depth of 30 ft, below low water mark; and, instead of extending to high water level, they only extended to a height of 6 ft above low water mark, and the concrete wall has been carried up to a height of 7 ft above high water level instead of to "about half tide level".

During the prosecution of these extra works it was found that the rock could not be reached, and the then Resident Engineer, Mr Pilkington, arranged with Mr Tomlinson and myself that the materials within the area to be enclosed should be dredged to such a depth as would admit of a flooring of concrete 12 ft. in thickness being laid, but no arrangements were made relative to the long length of concrete walls which have been built.

On taking charge, in September, I found that the concrete walls, (auxiliary dam so called) had been completed, and were secured from failure by a large number of iron tie-rods; that the

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